



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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February 24, 2017

David Brunato
Suddekor, LLC
240 Bowles Road
Agawam, MA 01001

RE: Agawam
Transmittal No.: X270355
Application No.: WE-16-010
Class: *OP*
FMF No.: 329948
AIR QUALITY PLAN APPROVAL

Dear Mr. Brunato:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the modification of the existing Kochsiek production printing presses (Emission Units 1 and 2) at your facility located at 240 Bowles Road in Agawam, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

Suddekor, LLC (Facility) prints decorative paper and plastic utilized in the manufacture of laminate flooring in the North American laminate industry. The printing operation is considered product and packaging rotogravure printing, as defined in the National Emission Standards for the Printing and Publishing Industry, 40 CFR Part 63, Subpart KK. The inks used in the printing operation contain volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

The Facility commenced operation on April 17, 2000. The Facility is currently operating in accordance with Title V Operating Permit #WE-12-016, issued July 11, 2013. The existing air contaminant sources at the Facility consist of:

- A seven-foot wide Kochsiek production printing press with a 5,964,421 Btu per hour natural gas-fired dryer (Emission Unit 1)
- A seven-foot wide Kochsiek production printing press with a 5,964,421 Btu per hour natural gas-fired dryer (Emission Unit 2)
- A Giave lab development press with a 1,023,642 Btu per hour natural gas-fired dryer (Emission Unit 3)
- A Giave lab development press with a 511,821 Btu per hour natural gas-fired dryer (Emission Unit 4)
- A hard chromium electroplating process and associated centrifugal spray scrubber (Emission Unit 5)

The Facility has submitted a Limited Plan Application to correct a previous best available control technology determination concerning the VOC and HAP content of the inks applied to paper substrates on the existing seven-foot wide Kochsiek production printing presses identified as Emission Unit (EU) 1 and EU 2. In addition, the Application requested to correct the maximum heat input ratings for each natural gas-fired dryer and the stack configuration information associated with EU 1 and EU 2. A revision to the Application, dated October 31, 2016, requested an increase in the annual VOC emission rate limits and a decrease in the annual HAP emission rate limits for EU 1 and EU 2.

The Application also stated that incorrect information had been previously provided for the stack height and maximum heat input ratings for the dryers associated with each of the two existing Giave lab development presses identified as EU 3 and EU 4. Since each of the dryers associated with EU 3 and EU 4 are exempt from the plan approval requirements pursuant to 310 CMR 7.02(2)(b)15.a., these corrections must be submitted to MassDEP in the subsequent Air Quality Operating Permit Minor Modification Application or in an operating permit renewal application, whichever comes first. The maximum heat input rates are listed correctly for each of the dryers in the Facility's description above.

In addition, the Application includes a change in the method of operation of EU 1 and EU 2 to apply inks to plastic substrates. EU 1 and EU 2 were previously approved for the application of

inks on paper substrates. However, plastic substrates require the use of a luxury vinyl tile ink that is not used on the paper substrates. EU 1 and EU 2 have been using inks on plastic substrates since November 2015 without a plan approval. Therefore, the application of inks on plastic substrates is being reviewed and included as part of this plan approval.

The plan approval history and requested changes for EU 1 and EU 2 are discussed in more detail below.

The construction and operation of two, seven-foot wide Kochsiek production printing presses (EU 1 and EU 2), each with a natural gas-fired dryer, for use with paper substrates, was originally approved by Plan Approval #1-P-02-023, issued January 14, 2003. Plan Approval # WE-12-017, issued September 12, 2012, modified EU 1 and EU 2 by including a HAP content limitation on the inks, an emission limitation on the total HAP emissions from each of the two existing production printing presses as well as a facility-wide VOC and HAP emission limit. The facility-wide VOC emission limit has since been removed pursuant to administrative amendment WE-16-013, issued July 29, 2016.

The Facility recently discovered that the plan approval application for PA #1-P-02-023 had multiple VOC emission calculation errors. These errors resulted in an incorrect BACT determination for the VOC content limitation (0.5 pounds per gallon of solids as applied) of the inks applied to paper substrates used in EU 1 and EU 2. Compliance with the VOC content limit has been a problem for the Facility since it has historically used inks with a VOC content greater than 0.5 pounds per gallon of solids as applied.

In addition, the Facility discovered that the plan approval application for PA #WE-12-017 had incorrect as-applied HAP calculations for the inks. These errors resulted in an incorrect BACT determination for the HAP content limitation (1.04% by weight, as applied) for inks applied to paper substrates used in EU 1 and EU 2. Currently, the as-applied HAP content for the worst-case ink formulation (Extra Dark) is lower at 0.65% by weight (0.062 lb/gal).

The Facility also disclosed that the stack heights for EU 1 and EU 2 were never raised to 10 feet above the roof as described in PA #1-P-02-023. Therefore, the Facility will raise the stack height for EU 1 and EU 2 to 40 feet above the ground in order to attain a stack height of 10 feet above the roof as originally approved.

The Facility indicated that previous plan approval application and operating permit application submittals contained incorrect maximum heat input ratings for each natural gas-fired dryer associated with EU 1 and EU 2. The maximum heat input ratings did not reflect the actual operations of the dryers. Therefore, the maximum heat input rates for the dryer associated with EU 1 and EU 2 have been corrected from 5,650,352 Btu/hr and 7,062,940 Btu/hr, respectively, to 5,964,421 Btu/hr each. Even though the heat input ratings have been corrected, the dryers are still exempt from the plan approval requirements of 310 CMR 7.02 pursuant to 310 CMR 7.02(2)(b)15.a. The maximum heat input rates are listed correctly for each of the dryers in the Facility's description above.

The Facility has requested an increase in the annual VOC emission limit and a decrease in the annual HAP emission limit for each production press. The VOC emission limits for each production press will increase from 7 tons in any consecutive 12-month period (established pursuant to PA #1-P-02-023) to 9.55 tons in any consecutive 12-month period. The total HAP emission limits for each production press will be reduced from 3.94 tons in any consecutive 12-month period (established pursuant to PA #WE-12-017) to 1.66 tons in any consecutive 12-month period. The annual VOC and HAP emission rate limitations for EU 1 and EU 2 were calculated by the Facility, as shown in Table 11 of the Application, using the maximum monthly ink usage for each ink on record from 2014, 2015 and 2016. The Facility's calculated maximum monthly emission rate was multiplied by 12 and then divided by 2 to arrive at the annual VOC and HAP emission rate for each press.

Monthly emission rate limits for each press will be 1.59 tons of VOCs per month and 0.28 tons of HAPs per month. These emission rate limitations were based on the maximum combined monthly emission rate from EU 1 and EU 2, as calculated by the Facility and shown in Table 11 of the Application, using the maximum monthly ink usage for each ink on record from 2014, 2015 and 2016. The Facility proposed that the maximum combined monthly emission rate should be established for each press to allow for flexibility in the event that one of the production presses would not be available and all production would be delegated to one press.

Regulatory Applicability

EU 1 and EU 2 are subject to the best available control technology (BACT) requirements of 310 CMR 7.02(8)(a)2. In lieu of an emission-unit-specific top-down BACT analysis, an applicant may propose an emission control limitation by using one or more of the approaches contained in 310 CMR 7.02(8)(a)2.a. through c. The Facility has chosen to comply with 310 CMR 7.02(8)(a)2.b. which allows for the proposal of an emission control limitation using a combination of best management practices, pollution prevention and a limitation on the hours of operation and /or raw material usage. This approach is only available if the proposed allowable emissions are less than 18 tons of VOCs per consecutive 12-month period, less than 18 tons of total organic material HAP and less than ten tons of a single organic material HAP.

The Facility uses several best management practices (BMPs) to minimize the evaporation of VOCs and HAPs from the storage, mixing and conveying of inks which are discussed in the following paragraphs.

All inks at the Facility are bought and stored in air tight 1,000 liter plastic totes equipped with dispensing valves in the closed position. The inks contained in the totes are transferred through a closed line to the metal cylindrical mixing tanks using an automatically controlled, closed loop, dosing system. The metal cylindrical mixing tanks have volumes ranging from 150 liters to 2,500 liters. The metal tanks are immediately covered once the ink transfer is complete. The inks are then mixed with an impeller that fits through a hole in the center of the tank cover. The cover is closed during the entire mixing process to minimize VOC and HAP emissions. After mixing, the metal tanks are covered with a fully encapsulating cover and moved to the

production press area. The metal tanks are hooked up to pumps which pump the inks into the ink holding pans within the application section of each production press. After production, the leftover ink in the metal tanks is recycled and used in the production of future orders. The recycled ink is pumped through a closed line to and from the metal tanks using an automatically controlled, closed loop system.

During the color matching process, adjustments are made to the production press mixing tank by manually adding small amounts of ink to see how the color changes. The amount of ink added to the mixing tank varies depending on how far the color needs to be adjusted, but no more than 5 gallons of each ink is added during a color-match adjustment. Since color matching is not an automatic process, the inks cannot be pumped into the mixing tank using the automatically controlled, closed loop, dosing system. Instead, the inks are manually dispensed from the storage tote into 5 gallon buckets from a nozzle located on the tote. The ink in the bucket will either be entirely poured into a production press mixing tank, or poured into a 5 liter pitcher used for smaller adjustments. The 5 gallon bucket will be covered except when ink is being transferred to or from the bucket. The 5 liter pitchers will not be covered since the ink will be immediately used or transferred back to the 5 gallon bucket. Any residual ink left in the bucket or pitchers will be poured into the waste ink drum which is covered except for when ink is being poured into the drum.

The above described BMPs for the storage, mixing, and conveying of inks will be included as BACT for EU 1 and EU 2.

As part of the pollution prevention portion of the BACT analysis, the Facility evaluated the VOC and HAP contents of the inks applied on paper and plastic substrates. For paper substrates, the Facility identified inks with the lowest VOC and HAP content that are technically feasible for application. The Arcolor Décor Black ink was found to have a VOC content of 0.611 pound per gallon of ink which is lower than the Hartmann Décor Black ink which contains 0.755 pounds per gallon. The Hartmann Décor Black ink is the Facility's worst-case as-applied ink used in the ink formulations. As a result, the Hartmann Décor Black ink has been replaced by the Arcolor Décor Black when technically feasible. The HAP content of the Arcolor Décor Black ink (0.098 pounds per gallon) is slightly higher than the HAP content of the Hartmann Décor Black ink (0.072 pounds per gallon). However, the slight increase in the HAP content of the Arcolor Décor Black ink will not have much of an impact on the annual HAP emissions from EU 1 and EU 2, since the Facility is proposing to decrease the existing annual HAP emission limit for each production press from 3.94 tons in any consecutive 12-month period (established pursuant to PA #WE-12-017) to 1.66 tons in any consecutive 12-month period.

Due to the varying VOC and HAP contents of the inks applied to paper substrates, a maximum calendar month weighted average VOC and HAP content limitation of 0.19 pounds per gallon of ink applied and 0.052 pounds per gallon of ink applied will be included as BACT. The worst-case calendar month weighted average VOC and HAP contents, as shown in Table 11 of the Facility's letter dated January 13, 2017, were based on actual ink usage, VOC emissions and HAP emissions from 2014, 2015 and 2016.

For plastic substrates, the Facility applies luxury vinyl tile (LVT) inks which are specified and required by the customer. The LVT inks are the lowest VOC and HAP content inks that can be used on plastic substrates. Based on the worst-case LVT ink formulation, a VOC and HAP content limitation of 0.33 pounds per gallon of ink as-applied and 0.00174 pounds per gallon of ink as-applied will be included as BACT.

In addition, there are no VOC or HAP-containing cleanup solvents used at this Facility. Only water is used for cleanup purposes.

Instead of proposing a limitation on raw material usage due to the wide variety of inks, the Facility has proposed to calculate and record the daily VOC and HAP emissions from EU 1 and EU 2. This will require daily records necessary for this calculation which include the daily quantities, VOC content and HAP content of each ink used on EU 1 and EU 2. The Facility has also proposed, as BACT, that the maximum air contaminant emissions from each of the production presses will not exceed 9.55 tons per year of VOCs and 1.66 tons per year of HAPs. The emission limits coupled with the requirement to calculate and record daily VOC and HAP emissions will restrict the potential to emit from EU 1 and EU 2.

In addition to being subject to the BACT requirements of 310 CMR 7.02(8)(a)2., the Facility is subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise reduction requirements of 310 CMR 7.10.

EU 1 and EU 2 are subject to 40 CFR Part 63; Subpart KK (National Emission Standards for the Printing and Publishing Industry). The printing operation is considered to be product and packaging rotogravure printing as defined in 40 CFR Part 63 Subpart KK. The applicable requirements have been incorporated into this plan approval.

Plan Approval #1-P-02-023, issued January 14, 2003, has been superseded in its entirety by Plan Approval #WE-16-010.

Plan Approval #WE-12-017, issued September 12, 2012, has been superseded in its entirety by Plan Approval #WE-16-010 with the exception of the Facility-Wide HAP Emission Limitation specified in Plan Approval #WE-12-017. The Facility-Wide HAP Emission limitation is still in effect.

EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU	Description	Design Capacity	Pollution Control Device (PCD)
1	Kochsiek Rotogravure Production Press and associated ink storage and mixing tanks	350 meters of paper or plastic/minute	None
2	Kochsiek Rotogravure Production Press and associated ink storage and mixing tanks	450 meters of paper or plastic/minute	None

Table 1 Key:

EU = Emission Unit Number

PCD = Pollution Control Device

2. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2a			
EU	Operational / Production Limit	Air Contaminant	Emission Limit
1	1. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to paper substrates shall not exceed a calendar month weighted average VOC content of 0.19 pounds per gallon of ink applied.	VOC	≤1.59 tons per month and ≤9.55 tons in any consecutive 12-month period
	2. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to plastic substrates shall not exceed a VOC content of 0.33 pounds per gallon of ink as applied.		
	3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to paper substrates shall not exceed a calendar month weighted average HAP content of 0.052 pounds per gallon of ink applied.	Total HAPs	≤0.28 tons per month and ≤1.66 tons in any consecutive 12-month period
	4. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to plastic substrates shall not exceed a HAP content of 0.00174 pounds per gallon of ink as applied.		
	5. In accordance with 40 CFR 63.825(b), each product and packaging rotogravure or wide-web flexographic printing affected source shall limit organic HAP emissions to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month.		
	6. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, only water shall be used for cleanup purposes.		

Table 2b			
EU	Operational / Production Limit	Air Contaminant	Emission Limit
2	7. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to paper substrates shall not exceed a calendar month weighted average VOC content of 0.19 pounds per gallon of ink applied.	VOC	≤1.59 tons per month and ≤9.55 tons in any consecutive 12-month period
	8. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to plastic substrates shall not exceed a VOC content of 0.33 pounds per gallon of ink as applied.		
	9. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to paper substrates shall not exceed a calendar month weighted average HAP content of 0.052 pounds per gallon of ink applied.	Total HAPs	≤0.28 tons per month and ≤1.66 tons in any consecutive 12-month period
	10. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the inks applied to plastic substrates shall not exceed a HAP content of 0.00174 pounds per gallon of ink as applied.		
	11. In accordance with 40 CFR 63.825(b), each product and packaging rotogravure or wide-web flexographic printing affected source shall limit organic HAP emissions to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month.		
	12. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, only water shall be used for cleanup purposes.		

Table 2a/2b Key:

EU = Emission Unit Number

Total HAPs = Total Hazardous Air Pollutants

VOC = Volatile Organic Compounds

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

Table 3a	
EU	Monitoring and Testing Requirements
1 2	<p>1. In accordance with 40 CFR 63.825(b)(2), the Permittee shall demonstrate compliance with the emission standard in Table 2a, condition #5 and Table 2b, condition #11, herein, by demonstrating that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of 40 CFR 63.825. The Permittee shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:</p> <ul style="list-style-type: none"> a. Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR 63.827(b)(2). b. Calculate the monthly average as-applied organic HAP content, C_{ahi} of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3 contained in 40 CFR Part 63 Subpart KK. <p>2. In accordance with 40 CFR 63.827(b)(2), the Permittee shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material applied by following one of the procedures specified below:</p> <ul style="list-style-type: none"> a. The owner or operator may test the material in accordance with Method 311 of Appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the owner or operator of the affected source, the supplier of the material, or an independent third party. The organic HAP content determined by Method 311 must be calculated according to the criteria and procedures in paragraphs 40 CFR 63.827(b)(2)(i)(A) through (C) of this section. b. The owner or operator may determine the weight fraction volatile matter of the material in accordance with 40 CFR 63.827(c)(2) and use this value for the weight fraction organic HAP for all compliance purposes. c. The owner or operator may use formulation data to determine the weight fraction organic HAP of a material. Formulation data may be provided to the owner or operator on a CPDS by the supplier of the material or an independent third party. Formulation data may be used provided that the weight fraction organic HAP is calculated according to the criteria and procedures in paragraphs 40 CFR 63.827(b)(2)(iii)(A) through (D). In the event of an inconsistency between the formulation data and the result of Method 311 of appendix A of this part, where the test result is higher, the Method 311 data will take precedence unless, after consultation, the owner or operator can demonstrate to the satisfaction of MassDEP that the formulation data are correct.

Table 3b	
EU	Monitoring and Testing Requirements
1	3. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310
2	CMR 7.12 Source Registration.
	4. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13

Table 3a/3b Key:

EU = Emission Unit Number
HAPs = Hazardous Air Pollutants
CFR = The Code of Federal Regulations
CPDS = Certified Product Data Sheet
USEPA = United States Environmental Protection
Agency

Table 4a

EU	Recordkeeping Requirements
1 2	<p>1. The Permittee shall maintain comprehensive and accurate daily records for each EU which shall include, but are not limited to:</p> <ul style="list-style-type: none"> a. The identity, quantity, formulation and density of each ink, additive, extender and any other VOC and/or HAP-containing material applied on each EU. b. The VOC content, in units of pounds of VOC per gallon of material, of each ink, additive, extender and any other VOC-containing material applied on each EU. c. The HAP content, in units of pounds of HAP per gallon of material, of each ink, additive, extender and any other HAP-containing material applied on each EU. d. The pounds of VOCs emitted from each EU, and e. The pounds of total HAPs emitted from each EU. <p>2. In accordance with 40 CFR 63.829(b), the Permittee shall maintain the following records on a monthly basis in accordance with the requirements of 40 CFR 63.10(b)(1) :</p> <ul style="list-style-type: none"> a. Records specified in 40 CFR 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report. <p>3. In accordance with 40 CFR 63.829(g), each owner or operator of an affected source subject to 40 CFR Part 63 Subpart KK shall maintain records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment), air pollution control equipment, or monitoring equipment.</p> <p>4. In accordance with 40 CFR 63.829(h), each owner or operator of an affected source subject to 40 CFR Part 63 Subpart KK shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.823(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> <p>5. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2a/2b above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved recordkeeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping.</p> <p>6. The Permittee shall maintain records of monitoring and testing as required by Table 3a and 3b herein.</p> <p>7. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.</p>

Table 4b	
EU	Recordkeeping Requirements
1 2	8. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s). The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	9. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s). At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	10. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	11. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	12. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4a/4b Key:

EU = Emission Unit Number
CFR = The Code of Federal Regulations
Total HAPs = Total Hazardous Air Pollutants
SOMP = Standard Operating and Maintenance
Procedure

USEPA = United States Environmental Protection
Agency
VOC = Volatile Organic Compounds

Table 5a	
EU	Reporting Requirements
1 2	<p>1. In accordance with 40 CFR 63.830(b)(6), the Permittee shall submit a summary report specified in 40 CFR 63.10(e)(3) of this part on a semi-annual basis (i.e., once every 6-month period). These summary reports are required even if the affected source does not have any control devices or does not take the performance of any control devices into account in demonstrating compliance with the emission limitations in 40 CFR 63.824 or 63.825. The summary report shall include, as applicable:</p> <ul style="list-style-type: none"> a. Exceedances of the standards in 40 CFR 63.824–63.825. b. Exceedances of the criterion of 40 CFR 63.821(a)(2)(ii)(A). c. The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.823(b), including actions taken to correct a malfunction. <p>All summary reports shall be delivered or postmarked by the 30th day following the end of each calendar half.</p> <p>2. In accordance with 40 CFR 63.830(c)(2), all reports required by this subpart not subject to the requirements in paragraph (c)(1) of 40 CFR 63.830 must be sent to MassDEP and the USEPA at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the owner or operator of a source, these reports may be submitted on electronic media. The USEPA and MassDEP retain the right to require submittal of reports subject to paragraph (c)(1) of 40 CFR 63.830 in paper format.</p> <p>3. The Permittee shall submit to MassDEP an annual report postmarked by no later than January 30th of each year, which minimally contains for the prior consecutive twelve-month period the following information:</p> <ul style="list-style-type: none"> a. The calendar month weighted average VOC content, in units of pounds of VOC per gallon of material, and calendar month weighted average organic HAP content, in units of pounds of organic HAP per gallon of material, for the inks applied to paper substrates on EU 1 during each month. b. The calendar month weighted average VOC content, in units of pounds of VOC per gallon of material, and calendar month weighted average organic HAP content, in units of pounds of organic HAP per gallon of material, for the inks applied to paper substrates on EU 2 during each month. c. The VOC and total HAP emissions from EU 1 during each month and in each consecutive twelve-month period. d. The VOC and total HAP emissions from EU 2 during each month and in each consecutive twelve-month period. <p>Associated calculations and all supporting data may be required to be submitted upon request by MassDEP or USEPA.</p> <p>4. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).</p>

Table 5b	
EU	Reporting Requirements
1 2	5. The Permittee shall notify the Western Regional Office of MassDEP, BAW Compliance and Enforcement Chief by telephone: 413-755-2131, email: saadi.motamedi@massmail.state.ma.us or fax : 413-784-1149, as soon as possible, but no later than three (3) business days after discovery of an exceedance(s) of Table 2a/2b requirements. A written report shall be submitted to Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	6. The Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.
	7. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30 days from MassDEP's request.
	8. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	9. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3a/3b Monitoring and Testing Requirements.

Table 5a/5b Key:

BAW = Bureau of Air and Waste

CFR = The Code of Federal Regulations

EU = Emission Unit Number

HAP = Hazardous Air Pollutant

USEPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee is subject to and shall comply with the Special Terms and Conditions as contained in Table 6a/6b:

Table 6a	
EU	Special Terms and Conditions
1 2	<p>1. EU 1 and EU 2 are subject to the National Emission Standards for the Printing and Publishing Industry, 40 CFR Part 63.820 through 63.831 and shall comply with all applicable requirements.</p> <p>2. EU 1 and EU 2 shall consist of the equipment specified in Table 1 herein.</p> <p>3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, EU 1 and EU 2 shall only be used to apply inks to paper and/or plastic substrates.</p> <p>4. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the ink mixing tanks associated with EU 1 and EU 2 shall be equipped with a lid, or other method approved by MassDEP.</p> <p>5. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the lid for each ink mixing tank associated with EU 1 and EU 2 shall:</p> <ul style="list-style-type: none">a. extend at least 0.5 inch beyond the outer rim of the tank or be attached to the rim of the tank; and,b. be maintained so that when in place, the lid maintains contact with the rim of the mixing tank for at least 90% of the rim's circumference; and,c. if necessary, have an opening to allow for insertion of a mixer shaft, which opening shall be covered after insertion of the mixer, except to allow adequate clearance for the mixer shaft. <p>6. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the Permittee shall comply with the following work practices:</p> <ul style="list-style-type: none">a. Store all VOC and/or HAP-containing inks, coatings, process-related waste materials and VOC and/or HAP-containing materials in closed containers;b. ensure that mixing and storage containers used for VOC and/or HAP-containing inks, coatings, process-related waste materials, and VOC and/or HAP-containing materials are kept closed at all times except when depositing or removing these materials;c. minimize spills of VOC and/or HAP-containing inks, coatings, process-related waste materials, and VOC and/or HAP-containing materials;d. convey VOC and/or HAP-containing inks, coatings, process-related waste materials, and VOC and/or HAP-containing materials from one location to another in closed containers or pipes;e. store and dispose of all absorbent materials, such as cloth or paper, that are contaminated with VOC and/or HAP-containing inks, coatings, process-related waste materials, or VOC and/or HAP-containing materials in non-absorbent containers that shall be kept closed except when placing materials in or removing materials from the container.

Table 6b	
EU	Special Terms and Conditions
1 2	7. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the maximum capacity of any bucket, pitcher, or other type of container used for transferring ink during the color matching process shall not exceed 5 gallons of ink at any time.
	8. The Permittee may make the approved changes herein, upon the submittal and receipt by MassDEP of a BWP AQ 10 Operating Permit Minor Modification application pursuant to 310 CMR 7.00 Appendix C (8)(d)3.
	9. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.

Table 6a/6b Key:

EU = Emission Unit Number
CFR = The Code of Federal Regulations
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.”
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
1	40	2.5 diameter	69	100-230
2	40	2.2 square	72	100-230

Table 7 Key:

EU = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with

the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Cortney Danneker by telephone at 413-755-2234, or in writing at the letterhead address.

*This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.*

Marc Simpson
Air Quality Permit Chief
Bureau of Air and Waste

ecc: MassDEP/Boston - Yi Tian
MassDEP/WERO – Peter Czapienski